

American



Farmer,

AND SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

• "O FORTUNATOS NIMIUM SUA SI ROMA NORINT
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THE AMERICAN FARMER.

EDITED BY JOHN S. SKINNER.

TERMS—The "AMERICAN FARMER" is published every Wednesday at \$2.50 per ann., in advance, or \$3 if not paid within 6 months. 5 copies for one year for \$10. ADVERTISEMENTS not exceeding 16 lines inserted three times for \$1, and 25 cents for each additional insertion—larger ones in proportion. Communications and letters to be directed to SAMUEL SANDS, publisher, corner of Baltimore & North sts.

BARRETT'S PATENT GARLIC MACHINE.—In the brief notice which we gave of this excellent machine on the 23d ultimo, we promised our readers a description of it in some subsequent paper, which promise we shall now proceed to redeem, and we do this with the more pleasure as we believe it to be one of real, practical utility; just such an one as was called for by the wants of Millers—millers did we say? nay, by the wants of the country; for who in the name of Epicurus would eat garlicky bread, if he could get that which is not tainted by that foul and pestilent intruder? Having said thus much by way of introduction, we shall proceed to give such a description of the machine itself, as we trust our readers will comprehend.

The machine is about the size of a Wheat Fan, though, as may well be supposed, of much stronger construction; perfectly simple in the detail of its works; unencumbered with all superfluous or complicated machinery, and challenges the confidence of a judge by the absence of all external or internal show for effect. Its inventor seems, in the arrangement of its parts, to have studied that economy which teaches simplicity to be the most beautiful, as well as the most efficient arm that can be wielded by a machinist.

The wheat passes from the feeder into an opening in front of the machine, whence it is conveyed to the top of a cast-iron scroll-screw plate. Here the smut is broken, and from its lightness is carried off, through a pipe or tube, from the body of the wheat by the blast produced by a small fan or blower, 16 inches in diameter and 8 inches deep. So regular and certain in its effects is the stream of wind thus generated, that it is immaterial how smutty the wheat may be, all is blown off without the possibility of the smallest portion attaching to the grains of wheat; and such is the masterly adaptation of means to ends—such the appropriate division of labor, if we may be allowed the expression, of the respective sections of the machine, that the work of expelling the smut from the grain is performed on the top of the first plate, and is wafted out of the mill through tin pipes without the possibility of its returning to vex the inventor, or commingle its sooty substance with the pearly powder of the grain.

After the separation of the smut from the wheat, the latter passes under the first named plate upon another, where it is kept in continual commotion by means of two agitators attached to the plate. Besides these two, there are other agitators below the plate, which perform a similar service to those just described. By means of a leverage-pressure, the continual motion of the wheat, and the action of the agitators, the garlic, rat dirt, cheat, and other extraneous substances, are broken and carried off

through a pipe acted upon by the fan or blower before named, without in the least impregnating the grain with their noxious qualities. The wheat, after undergoing the process of cleansing, is by its own specific gravity precipitated to the bottom of the tube or pipe, in a condition fit for grinding, being perfectly cleansed and separated from all foreign substances.

The garlic, rat dirt, smut and other offensive matter, by the force of the wind generated by the fan or blower, is conducted out of the mill through the agency of pipes.

The leverage-pressure is so arranged that it can be regulated at will so as to produce the precise degree of compression needed.

The velocity of the machine is from 200 to 250 or 300 revolutions in a minute, may be controlled to suit the particular work on hand, and is, necessarily, exempt from all danger of creating any degree of heat calculated to produce fire, as the weight of the running parts rests upon the grain, which as it is cleansed of its impurities passes out. Hence the necessity of steps or gudgeons at the lower end of the shaft is entirely obviated.

The machine is capable of being attached to any motive power whatever, and may be placed in any part of a mill.

It strikes us that every owner of a mill will see the propriety of supplying himself with one of these machines, as interest, that great lever which propels human actions, will compel him to do so; for the conclusion is obvious, that no merchant will buy garlicky flour when that which is not so can be obtained, and there is now no longer any excuse for its being so.

We believe that the loss of power in grinding wheat, which is very garlicky, is equal to 25 per cent., and surely this circumstance, when considered in connection with the improved condition of the flour, after the wheat has undergone the cleansing process, must exert a powerful influence with every manufacturer in the country.

We understand that Mr. Dennis C. Lieutaud, No. 6 Light street, Baltimore, is the agent for Maryland and Virginia, and in conclusion we will advance the hope, that the inventor may reap a fruitful harvest as the reward of his exertions to introduce this truly efficient machine to the notice of his countrymen.

Editors with whom we exchange will subserve a good purpose by noticing this invention.

THE CROPS—We continue to publish such accounts of the crops as we receive from different quarters, from which the reader will be enabled to form his own conclusions as to the result; for our own part, we still believe, notwithstanding the gloomy accounts from some parts, that the wheat crop will be fully an average one; the oats deficient, and the corn considerably short.

We have very unfavorable accounts from Calvert county, Md. relative to the Tobacco crop—there had been but little rain for two months, and but few of the planters had succeeded in setting out many of their plants.

A letter from Bloomsbury, Pa. says, "the wheat crop in this section of the country is very much injured by the fly, and it is supposed there will not be half a crop. If the wheat you refer to in your paper, called "fly proof" should be of the description and will avoid the injury to

which the wheat at present in use is subject, it is very desirable that it should be scattered throughout the country."

[The writer of the above wishes to know if Mr. Gray can furnish a few bushels of the above wheat, and at what price. He will oblige by dropping a line to the publisher of the American Farmer relative thereto, as it is probable others will be anxious also to give it a trial.]

Since the above we have received the following from a friend in Washington county, in this state. If Mr. Gray will make an arrangement with some of our seedsmen or others, for the sale of his seed wheat, no doubt a considerable quantity could be disposed of in this vicinity, if offered at a reasonable price.

"In No. 5, vol. 3, I find a letter from Jno. Taliaferro, esq. to J. B. Gray, esq. giving some statement of a German wheat, resisting the effects of the fly, and known as "fly-proof." Could I get the favor of you to procure me a few bushels of this wheat, at what price, and clear of garlic. From the representation given by Mr. Taliaferro, it is a most desirable object, and you will confer on me a particular favor by your attention and a speedy reply.

"I am pleased to find in your 6th No. the idea of a "National American Society of Agriculture," suggested, and as far as the services of an old agriculturist can contribute to the accomplishment of so important an object, I will cheerfully throw in my mite."

A letter from the upper part of Baltimore county, says, that the rye harvest commenced on the 1st inst. and the crop will be a moderately safe one, being but little injured by the rust, though it made its appearance in the head some weeks since. The wheat bids fair to be an excellent crop.

The Phila. U. S. Gazette says—It is probable that the grain and grass crops were never better in the northern and northeastern portions of this state, than they appear this season. In other parts of Pennsylvania, we incline to believe that there will be a deficiency, as also in other states, especially in the west.

The Winchester (Va.) Republican says—"Accounts from all sections of the country represent the prospect for the wheat crop as unfavorable. In this and the neighboring counties, although the wheat in many instances suffered considerably from the fly, and recently from the rust, we still believe, from present appearances, that nearly an average crop will be secured by our farmers. The corn (now become a most important crop to the farmers of the Valley,) under all the disadvantages arising from a wet and cold spring, looks far better than could have been expected at the time of planting."

A letter from New York, says—"We have yet better news in regard to the crops; and, croaking aside, I believe the harvest will show a nett abundance. In Michigan, where, as one of the editors says, they have the best wheat and the worst currency in the country, the grain crop will be large enough, and more than large enough to make up for all deficiency in New-York."

The Frederick (Md.) Herald of Saturday says, that the grain of the wheat is defective, and that the crop will not be so large as was expected. Rock wheat is suffering from the rust.

The wheat harvest, says the Petersburg, (Va.) Intelligencer of the 1st, has commenced, and the farmers are favored with dry weather and a warm sun. If this weather will but continue for a few weeks longer, the wheat crop will be secured under most favorable circumstances.

The Alexandria (D. C.) Gazette of Saturday, says, that the information from the adjacent counties in Virginia and Maryland continues to be favorable to the growing crops.

The Milledgeville (Geo.) Journal says—Appearances a few weeks ago, were of the gloomiest character in relation to the crops; but within a week or two, a great change has taken place. The rains that have fallen lately in every direction, throughout the whole country, have materially improved the appearance of the corn crop, which promises now to yield an abundant harvest. Cotton, too, begins to look much better. We are informed, that in Southwestern Georgia, the crop of cotton, from present appearances, will be a very large one. In middle Georgia, the farmers have not, generally, a good stand, but what they have, begins to look very promising. Let but the seasons continue to be good, and that kind of relief, which alone can do our people and State any real good, will be, by a kind Providence, dealt out to them.

The Macon (Geo.) Messenger says—The cotton plant generally presents a reasonable prospect for a middling crop, nothing favorable for a large one; considerable injury has been sustained by the late and cold spring, and something from lice; at this time the plant appears to be thriving throughout the state, and the season is favorable to its growth. The corn crop generally presents a very flattering prospect. Should the season prove as favorable for it for a month to come as at present, it will be a large one; the crop of oats has been but middling, in the aggregate, but in some places it is good. Wheat in many parts has been good, in others but moderate—but altogether it is sufficient to supply the demand for domestic consumption. It has been harvested generally in good condition. Fruits, such as apples, peaches, &c. will be plenty.

The Howard Free Press says there will be little more than average crops in that District. The forward wheat is doing well, but the late is unpromising; corn is backward but looks well. Of grass an abundant crop will be produced, owing to the wet season. Rye is indifferent; potatoes promise well.

They had green corn on their tables in Wilmington, N. C. two weeks ago, which is uncommonly early.

WASHINGTON CITY, July 4th, 1841.

J. S. Skinner, Esq.—Dear Sir: Can you inform me through the next No. of the Farmer, whether it would be of any advantage to Buckwheat and Millet seed to soak either or both of them, as I am about to sow some of each—part of the buckwheat is to be turned under as a manure, a part for the grain—By so doing you will oblige
A NEW BEGINNER.

Doubtless it is always well if convenient to soak all kinds of seed, taking care that it is not continued too long. If it answer no other purpose it will enable the farmer to float off unsound grain and other impurities and offal. If the season is advanced, the farmer may in that way make up for lost time, and every thing does better which grows "right off," without being stunted by cold or short feed when young.—Ed. A. F.

To the Editor of the American Farmer:

A correspondent who signs himself "A. D." in your last number, has the following paragraph in reference to a recent discourse on the *Gramineae*, or True Grasses: "The Doctor may be a botanist, but when he throws *Clover* and *Lucerne* from the vegetable kingdom, I would like to know where he places them?" This is a strange question—and with all due respect, it may be added, a very silly one—to come from a reader of so enlightened an agricultural journal as the "American Farmer." If the Editor thought it worth while to publish such a query, he might have answered it, himself, in a note of three lines appended to the inquiry. The idea of throwing *Clover* and *Lucerne* from the vegetable kingdom, is almost too ludicrous for serious notice. Who ever intimated such a thing? It is doubtful whether "A. D." has any definite conception of the terms used. The "vegetable kingdom" comprehends all organized living objects which are not endowed with sensation;—in other words, all living beings except animals. The true Grasses are only a single tribe, or subdivision, of that "kingdom,"—perfectly well characterized, and distinct from all other tribes. They have no more natural affinity with "Clover and Lucerne," than they have with Potatoes or Cabbages. It does not require much of "a botanist" to distinguish Cabbages from Grasses; every man of common observation can do that: yet in excluding the material of our crows from the Grass tribe, he does not necessarily throw cabbages from the "vegetable kingdom."

If one were to write a treatise on the ruminating animals, and took occasion to say that *Jack-asses* did not belong to the *cut-chewing* tribe, would that distinction throw the *Jacks* from the animal kingdom? I rather suppose that "A. D." himself, though undoubtedly an animal, would not object to having the *asinine* family arranged in a separate tribe, or subdivision, of the animal kingdom. So, in like manner, the naturalists have recognized the very obvious distinction between the true Grasses, and the various other tribes of vegetables. "Clover and Lucerne," belong to a large and well characterized natural family of the "vegetable kingdom," known by the name of *Leguminous* plants,—bearing generally what are called *Papilionaceous*, (butterfly-shaped,) or pea-blossomed flowers, and the fruit is always a *Legume*, or bean-like pod, containing one or more seeds. Nothing can be more distinct, or more readily distinguished, than the *Leguminous* plants, and the true Grasses. Every clod-hopper and cow-boy in the land, can distinguish at a glance, the difference between *Clover* and *Timothy*, or *Orchard Grass*, or any other genuine Grass; and I am sure, if "A. D." had allowed himself one moment's reflection, he would not have been caught propounding such an absurd inquiry as that which I have had the mortification to notice, in your very respectable journal. Surely, the readers of the "American Farmer" must feel it as a burlesque upon their intelligence, to have such queries put forth gravely to the agricultural world, at this period of the nineteenth century. I cannot but think it must have got into the compositor's hands by mistake.

[The query alluded to in the above communication, did not get into the hands of the printer in mistake, as the writer intimates may have been the case—it was intended to have been accompanied by some remarks, if noticed at all, but we concluded that it would draw from the Dr. something that would interest and instruct our readers generally, as every thing from his pen is calculated to do—This is the true reason, but we acknowledge not a sufficient one, for the insertion thereof in the form in which it appeared, and an apology is due therefor.

Tall Rye.—The Hagerstown Torch Light boasts of a stock of rye measuring 8 feet, which was taken from a lot adjoining that town. The Frederick Citizen says, in the Mayor's office in that city, there is a stalk of rye measuring 9 feet, taken from a lot adjoining the city. And the Howard Free Press says Mr. Frost of that district has sent the editor a stalk measuring 7 feet 3 inches.

MR. CANBY'S "BLOSSOM."—We published last week a notice of the great yield of this and two other cows, copied from the Philadelphia U. S. Gazette. Mr. Canby has since addressed the following note to the editor of the Gazette, which we record for the purpose of stimulating other breeders to forward for publication the results of the produce of their cows.

Dear Sir—My father has just shown me your letter requesting an account of my Durham cow Blossom, her milking, &c. Below is the statement for one week, by which you will perceive she exceeds last year's trial both in milk and butter, particularly the latter; as during the trial last year, the weather was much warmer than this, and as we have, for want of a spring house, to keep our milk in a cellar, every one conversant with the business will know it cannot yield as much in hot weather. Indeed, I have not a doubt, that with a good spring house, she would have made 19 or 20 pounds of butter this season. Last year, one month from calving, Blossom gave for the week 247½ quarts, being over 35 quarts per day, which made 13½ lbs. of well worked butter; this summer, near two months after calving, she gave in one week 253½ quarts, being over 36 quarts per day, which yielded 17½ lbs. of superior butter, which was well worked before weighing; the milk also was never measured until after the froth settled.

It may be as well to state, that there was not the slightest change made in Blossom's keep during the trial; she ran in the pasture with the other cows, and was fed precisely as she had been before, and will be all the season. She had her first calf in April, 1838, and her sixth on the 12th of last April, (having twins twice) and during that time we have never been able to get her dry, as she has always given from 12 to 16 quarts per day up to calving. Very respectfully,
SAML. CANBY.

Blossom's yield of Milk for one week.

1841	Morning.	Noon.	Evening.	Total.
June 24	13½ qts.	12 qts.	10½ qts.	36 qts.
3d	13½	12	11	36½
4th	13½	12½	10½	36½
5th	13½	12	11	36½
6th	13½	12	10½	36
7th	13½	12	10½	36
8th	13½	12	10½	36

Total

253½ qts.

Being on an average over 36 quarts per day.

We had the pleasure a few days since of renewing our visit to the farm of Mr. Beltzover, near this city, where we were delighted, as we always are in our visits there, in beholding his beautiful and extensive herd of Short-horn Durhams. We question much whether there is a more extensive stock of valuable cows to be found in the United States than is here exhibited, taking into consideration their pedigrees, beauty of form, and milking qualities—and although no individual of the herd may reach the point attained by "Blossom," yet there are several which are not very far behind her. Mr. B. has also several young bulls, which according to our notion, come up to the very perfection of beauty. No admirer of fine stock on visiting our city, should fail to visit this establishment, which reflects great credit on the superintendent thereof.

We also called to examine a beautiful 3-4 Durham cow and her progeny, owned by A. B. Kyle, esq. of this city, with which we were very much delighted—and the statement made to us by Mr. K. of his plan of treatment towards his cattle, shows what can be effected by judicious management—When he purchased her, after her first calf, she gave less than a gallon of milk per day—she has since had three calves, all heifers, and now at her side, (by Mr. Beltzover's "Doctor" and Mr. Mankin's "Lectolyn,") which are most beautiful animals, and which from the points exhibited by the older ones, bid fair to surpass the dam in milking qualities—and she has yielded by the kind care and skilful management of her owner, as much as 6½ to 7 gallons of milk per day.

It seems from a recent statistical statement, that the rank of the several States in agricultural productions, is as follows:—

In Wheat—1st, Ohio; 2d, Pennsylvania; 3rd, New York.

In Indian Corn—1st, Tennessee; 2d, Virginia; 3rd, Ohio.

In Potatoes—1st, New York; 2d, Maine; 3rd, Pennsylvania.

In Cotton—1st, Mississippi; 2d, Alabama; 3rd, Georgia.

In Tobacco—1st, Tennessee; 2d, Maryland; 3d, Virginia.

In Wool—1st, New York; 2d, Ohio; 3d, Vermont.

In Swine—1st, Tennessee; 2d, Ohio; 3d, Kentucky, probably.

In Lumber—1st, New York; 2d, Maine.

Louisiana, of course, raises the most sugar; but there are immense quantities of maple or country sugar made in New York, Ohio and other States.

INTERESTING FACTS—STATISTICS OF THE U. STATES.

—The Journal of Commerce has an article upon the fruits of the soil, which embraces some interesting statistics. It seems that the sixteen million of people who live in the United States, possess lumber to the value of eleven million of dollars, which with brick and stone of an incalculable amount, constitutes the materials for their dwellings. The income of their orchards is upwards of six million of dollars value. They had more than twenty-six million of pounds of wool to convert into broadcloths, blankets and hosiery, &c.—more than a thousand million pounds of cotton to manufacture into useful and necessary garments, and more than three hundred thousand pounds of silk for elegant and fancy dresses. The amount of their flax and hemp united was nearly a million of tons. For food we had last year, more than seventy-three million of bushels of wheat, equal to more than fourteen million of barrels of wheat flour. Also, more than seventeen million bushels of rye; upwards of six

million bushels of buckwheat, and three million bushels of barley. The value of poultry that strolled about the yards and enclosures was more than nine million of dollars. The number of swine was upwards of twenty million, and the number of sheep more than nineteen million.

These people of the United States had the last year, more than three hundred and seventeen million bushels of Indian corn; more than ninety-nine million bushels of potatoes, and upwards of thirteen million neat cattle, which furnished them: milk, butter, and cheese, &c., to the value of more than thirteen million of dollars. They had at their command the labor and services of more than three million of horses and mules, and upwards of an hundred and six million bushels of oats, and nine million tons of hay, on which to feed these and their other cattle. To sweeten whatever seemed bitter or acid to the taste, they had more than two hundred and eighty million pounds of sugar.—Their land yielded to them, for their indulgence, more than seventy-seven million pounds of tobacco, and upwards of two hundred and seventy thousand gallons of wine with which to cheer their hearts. Such is the income of their soil only.—And when we think of this in connection with our vast resources, have we any reason to despond, though financial clouds do lower upon our land? America must be the most prosperous country upon the face of the globe. *Let us arouse.*

WHEAT—Messrs. P. A. & S. Small, of York, Pa. have addressed the editors of the "American" the following note, relative to a species of wheat grown by them, which they deem worthy the attention of agriculturists.

"We noticed in the 'American' of 25th June, some remarks on several specimens of white wheat cut from the fields of Mr. Joseph Pearson, near Baltimore. We presume they are the produce of the seed got from us last season. The large grain wheat, (call it what you please) is of foreign origin, brought to this country about five years ago. A small quantity was sown by a gentleman of this town, but it did not succeed very well, having frozen out. It appeared as though it could not stand a hard winter. Thinking it worth a trial, however, we procured some seed and have been successful in its cultivation ever since, and are of the opinion that it has now become acclimated. We have no hesitation in saying that it will produce as much to the acre as any other wheat we ever saw, with perhaps the exception of the Genesee, which is also a very handsome, white sort, with a red chaff. The heads of this latter are remarkable for their size, being nearly twice the length of the generality of wheat grown in this region. As we have never heard of its cultivation heretofore, we think it well to state how it was brought forward, which was in the following manner. About 4 years ago we sowed an excellent sort of wheat, which we obtained from Mr. Stanley, of your city, which he called Genesee. When we were cutting it, our late father, a short time before his death, noticed some heads which were remarkable for their size and beauty. We accordingly selected as many as produced a few quarts of grain, and we sowed this and its produce from time to time, and find that it has not degenerated. In this way we think we have succeeded in introducing, if not producing, a species of wheat which is worth the attention of agriculturists. As it regards the quality for bread of the above two kinds, the large grain—or mountain wheat, if you please—is the best we ever ground in our mills. We obtained a half bushel of the famous Rock wheat last season, and sowed it in the same field with the Mountain and Genesee—and although it is good it bears no comparison with either of the others."

CULTIVATION OF COFFEE.

No matter how remotely the reader may be interested in the subject, every curious inquirer will be glad, at so little trouble, to learn, what the following correspondence imparts in respect of the culture of one of the most important articles of commerce and of human consumption:

From the African Repository.

Dr. W. Johnson—Dear Sir—I will thank you for replies to the following inquiries:

What is the quality of Liberia coffee? Is the soil best calculated for growing coffee abundant in Liberia? Is the plant easily raised? What number of trees will grow

profitably on an acre? At what age does the tree commence bearing? What is the average product of the tree when mature? What is the cost per acre of clearing land, and preparing it for the coffee tree, and what the amount of labor to keep the land and trees in good condition?

Replies to the above inquiries, and such other information as you may be able to give in relation to this subject, will much oblige several respectable colored men who are preparing to emigrate to Liberia, some of whom have the means of engaging largely in the coffee business.

Yours, &c.,

S. WILKESON.

PHILADELPHIA, June 3, 1841.

SIR—I received yours of the 29th this evening, and will endeavor to make satisfactory answers.

All who have tried the Liberia coffee, as far as I have heard, say that it is equal in quality to the Mocha or Java. The usual cost of clearing land in Liberia, and introducing a crop of rice, is about five dollars worth of goods, at African prices, per acre. The natives are accustomed from their childhood to that kind of work, and will do as much as white men for twenty-five cents per day, or three dollars per month. A large part of the country is covered only by a recent growth of wood, as the natives clear new farms every year. They neither use ploughs nor hoes, and when the bushes and trees are cut and burned, the land is prepared to receive the seed or whatever they cultivate. The land on that coast commences to rise toward the interior almost in the immediate vicinity of the ocean. At the distance of about five miles inland the sandy soil and the swamps entirely cease, and are succeeded by a moderately elevated and rolling country. The lower levels are composed of clay and loam, with a mixture of sand sufficient for making bricks, and the higher, which occupy far the greater part of the country, of a reddish gravelly loam, precisely adapted to the cultivation of coffee.

In September and October limes should be collected, and the seed separated by rotting and washing them, and sown in a nursery, and coffee preserved for seed in December.

The land should be cleared in January; February and March, team and harrows prepared; rice sown in April, and the lime seedling transplanted into a hedge, and coffee sown in a nursery. Two men will easily enclose forty acres with hedge in ten days. After planting, it requires scarcely any further care, and will in eighteen months be sufficient to prevent the passage of any domestic animal. When well grown it will prevent the intrusion of monkeys, as it is thickly set with thorns.

The price of a yoke of bullocks, is about thirty dollars. Rice requires no farther cultivation, but the sprouts from stumps should be destroyed as soon as they spring. The rice will be cut in August, threshed and sold in the rough state, and the land immediately ploughed. As the roots are small and soon decay, they will by this time obstruct the plough much less than they would have done at first. Peanuts may be planted at this season, and are one of the best products for commerce—of so quick growth and so little expense. At the first and second ploughing, we may also raise corn, pumpkins, peas, millet, sweet potatoes, &c. In the next March the ground should be ploughed again, marked and cross-marked, and planted with corn. In May a coffee plant is to be set in every third hill of every third row, being at the distance of about ten feet, and five hundred trees grown on an acre. In June if any have died others may be introduced from the nursery. Afterwards the same things may be produced twice a year until the coffee is four years old, by ploughing between the rows of coffee, which may be manured with the trash left on the land.

Peanuts might be raised constantly instead of other crops. The vines require to be pulled up, and the peanuts picked off like potatoes, and then by partly covering the vines with earth another crop will be produced indefinitely, and if the land should require ploughing to destroy the other vegetation, the vines can be picked and transferred to the ploughed ground at the same time.

The coffee requires rather close topping after it is two feet high, as the elongation of the lower part of the trunk will even then make the full grown tree six or seven feet in height, which it ought not to exceed. It always bears when cultivated on the third year, though but a small quantity. There is a large increase in the product every year, and in seven years, I think from my observation of a number of trees of about that age, they will average four pounds per tree. We have not yet seen the tree at-

tain its full growth, but it doubtless requires about fifteen years.

In the West Indies it is said to grow twenty years.—The lowest estimate of those in the Colony who have raised, measured and weighed the coffee repeatedly, is five pounds per tree for an average production. This is quite extraordinary, as in the West Indies the average crop is stated by very respectable authority to be, at full bearing, a tierce of a thousand pounds to an acre, on which they plant about seven hundred trees. A coffee tree in Monrovia yielded last year two bushels three and three-fourth pecks of berries, which produced seventeen pounds of cleaned and cured coffee. Such facts as these are fully explained by the appearance of the trees. They will grow, if not topped down, to the height of twenty feet, and will cover ten feet square of land, while the extent of the branches in the West Indies, is not much larger than that of a hoghead.

The coffee berries are commonly borne on the branches more compactly than any other fruit which I recollect to have seen. A small branch which I brought to New-York, bore, within the space of one foot square, 160 berries, and was a fair specimen of their general appearance.

The plant is indigenous in Liberia, or has become naturalized, so that it abounds in the forest.

The usual allowance of laborers in the West Indies, is one slave to an acre of coffee. But we have free women, children and natives for its prosecution, to all of which circumstances it is very well adapted.

We have two or three kinds of coffee, one of which, and the best, has leaves as large as a hand, and another as small as that of the apple tree. Yours, W. JOHNSON.

MORTALITY AMONG STOCK.—We alluded to this subject in a former paper, but we had no idea at that time, of the extent of the loss which the farmers of this county have suffered by the death of their cattle and sheep. We have been informed by the Assessors for this county, that while upon the Island in the discharge of their duty as Assessors, they kept a record of the number of cattle and sheep lost by the farmers there, during the last winter and spring. After passing over three-fourths of the Island, they kept no account of these losses, finding it to be troublesome, and to interfere with their business. The number of cattle that died in that part of the Island where the account was taken, amounted to 300; the number of sheep was greater. The loss in other sections of the county is said to be greater than on the Island. Assuming the Island to be one-seventh part of the county, and the deaths to have occurred in the same proportion, the number of cattle lost by the farmers in this county last winter, will be 2800. But 3000 is considered a more correct estimate, as the mortality was greater in other parts of the county than it was on the Island. Of the number of sheep that died, no correct estimate can be made. Some farmers lost all they had. Mr. Wm. Paca, we learn, lost over two hundred. —*Centerville (Md.) Sentinel.*

ARRIVAL OF THE BRITANNIA.

NEW YORK, JULY 4—The Britannia steamship, at Boston yesterday, brings us Liverpool dates to the 19th ult., and 15 days later news from all parts of Europe.

The principal item of political importance is the success of Sir Robert Peel's "no confidence" motion by one majority, thus:

For Sir R. Peel's motion	312
Against it	311

This result even was cheered, and Sir Robert threatened, upon the success of it, to introduce a motion to stop the supplies, unless the Ministry gave in. This was at half past three o'clock Saturday morning, when Lord John Russell remarked that he would take till Monday to consider what course the Ministry would advise the Queen to take. On Monday he intimated their intention to advise a dissolution of Parliament, when Sir Robert Peel agreed to make no effort to stop the supplies. Lord John also said the new Parliament should be assembled as soon as possible. The proposed committee for the Corn Laws is abandoned for the session, and an appeal is taken to the country. It was thought the dissolution would take place the 22d June.

The English journals are so engrossed in their own affairs, that they have nothing to say of McLeod, or of American politics in general.

The British Ministry expect to sustain themselves before the People. Lord John Russell stands for London. In his address to the People he says: "Her Majesty's Government wishes to lighten that kind of taxation which, while it yields nothing to the Exchequer, presses heavily upon the People."

The crops throughout Europe promised well. In Egypt there is the greatest abundance. The world will hardly need our grain this year.

COLUMBUS, Ohio, June 21, 1841.

J. S. Skinner, Esq.—Dear Sir—A friend has sent to the writer of this the following queries and statement:

"What would be the most eligible and practicable improvement to insure punctuality to the mail between Mobile and New Orleans? The Department gives \$80,000; and notwithstanding numerous and heavy fines, failures are very frequent. Might not a rail road be made, across Florida, at some point to expedite the mail between Charleston and New Orleans?"

"Again: what do you calculate will be according to past development, the amount of population, in given time, say 20 or 25 years, the produce of whose labor might go through New Orleans?"

Without pretending to give altogether satisfactory solution to problems of such magnitude of element, and upon which so much depends, I solicit the medium of the American Farmer to convey such data on the subjects as I possess.

In the first instance I must repeat with some change the first query: "What is the most eligible and practicable improvement to the mail between" any two or more points? In answer, it may be unhesitatingly replied, allowing other circumstances to be any thing near equality, A ROAD. What kind of road must depend on contingencies of time and place. Combining punctuality, in time with speed, a rail-road is the very acme of improvement within human powers. Wherever there may be any chain of intercommunication between two or more points, and composed of alternate links over land and water, no sum, however great, can insure punctuality. I have been over the intermediate space between New Orleans and Mobile, by both land and water, and as to the latter through the bays, sounds, and lakes, and though the distance does not exceed if it amounts to 150 miles, I would with no supposed means of transportation or skill in their management, expect punctuality.

As to a rail-road across Florida, along more than one tract, there is no doubt of its practicability. If for instance, we take the mouth of St. Mary's river, as the point of outset on the Atlantic, a road, Rail or McAdamised, of about 130 miles, can be drawn to Vacassunga Bay or mouth of Suwanee river; one of less than 200 miles to Appalache Bay, and one of about 250 miles to the mouth of Appalachicola river. But were any one or all of these routes actually completed and in operation, much as they might facilitate travelling and commercial transactions, they could not secure punctuality to the mail, but on the contrary, increase its uncertainty.

Another postulate may be risked as regards the mail, and that is, that where increased distance is to be incurred by two routes, one by land and the other by water, the former ought to be preferred, unless the choice is to be determined by some peculiar circumstance. If we return to Charleston, though numerous rivers intervene, a rail-road can be extended thence into the city of New Orleans. I am not minutely acquainted sufficiently with the intermediate country to specify any route, but the following distances may serve to give a general idea, commencing with Augusta in Georgia, as a rail-road already exists between that place and Charleston:

Milledgeville from Augusta,	92	—	92
Macon,	31	—	123
Flint River,	40	—	163
Chatahoche River,	60	—	223
Blakeley on the Eastern side of Mobile Bay,	255	—	478
Mobile city,	8	—	486
Pasagoula river,	50	—	536
Rigolets or mouth of Pearl River,	75	—	611
New Orleans,	25	—	636

I have no precise data at hand to shew the precise distance from Charleston to Augusta, but taking it at 150 miles, gives 786 miles from the harbor of Charleston into the city of New Orleans. We may indeed regard a round distance of 800 miles as fully embracing ground over which a road may be constructed, along which, crossing of rivers excepted, the mail may pass with celerity and punctuality. Some may ask, how are the marshes to be passed, which spread around the mouth of Pearl river, and along both branches of the Rigolets, and again between Lake Pontchartrain and the Mississippi? This problem has been already solved; a rail-road has been formed, and is now in operation from the Mississippi at the city of New Orleans over the same marsh to Lake Pontchartrain.

But to retrace our steps, I am bold to say, that the mail

from the seat of the General Government to the great commercial outlet of the central valley, ought not in any part of the distance, be exposed to the risk of water carriage. As promised already I do not pretend to minute accuracy, but give, as affording general views, the following:

Richmond in Virginia, from W. C.	115	—	115
Petersburg, do.	21	—	136
Boundary between Virginia and N. C.	50	—	186
Halifax in North Carolina,	15	—	201
Raleigh, do.	88	—	289
Boundary between N. and S. C. near Sneedboro',	120	—	309
Columbia, the capital of S. C.	90	—	399
Hamburg, opposite Augusta, in Geo.	75	—	474

—Here we find the distance to be 474 miles from the General Post Office to the already finished Rail Road from Charleston to Augusta, which added to 636, gives 1,110 miles from Washington by land to New Orleans.

Let no one be startled at the idea of extending a continuous rail-road, or McAdamised road over 1,100 miles, nor of the coming time when 10 miles per hour the mean of 24 hours, will be regarded as common travelling on the great mail routes. It is time for the people, particularly on the Atlantic slope, to rouse themselves to serious attention to the necessity of making the paths plain and motion speedy into the great interior.

When the writer of this article first entered New Orleans, April, 1805, that city contained about 8000 inhabitants; thirty-five years afterwards, or in 1840, the Census returns of the people of this city gave a total exceeding 101,000, or an increase of between 12 and 13 per cent.

Many persons who either are unacquainted with, or disregard the permanent objects in nature, have supposed that other channels, that of the Atchafalaya for instance may supersede that by the Main Mississippi by New Orleans. The Iberville formerly, the Atchafalaya yet partially, the Plaquemine and Lafourche, in their nature were and are mere surplus outlets when the great river is at high flood; but the bottom of that mighty stream is similar to the channels of all rivers, the deepest valley of the country through which it flows.

There are two changes to which the Mississippi is subject, especially in the lower part of its course. That river in part of its length flows in curves which much more formerly than at present approached circles, the necks or isthmuses which remained to complete the circle of less or greater breadth. The river every where slowly wearing away one side, and extending bars on the other, has, within the period in which civilized inhabitants have resided on its banks, acted on both sides of several of these necks, and cut them through, and thus far and no farther changed its channel. The last of these changes happened only a few years since opposite the mouth of Red River and outlet of Atchafalaya. But Grand, Providence, St. Joseph's Concordia, and Fausse rivers on the western side, and Yazoo and Homechitto on the eastern, are all products of the same kind. When the waters are low I have seen the current flowing out of the Atchafalaya into the Mississippi. At New Orleans itself the other kind of change has been in operation since the first settlement of the place, or through 124 years, and has not in that period materially changed the front of New Orleans proper. The change has been principally operated in the front of the Upper Fauburgs, and there proves the very gradual and partial change of channel. In brief, there is as much and at most little more in the operations of the phenomena of nature to deprive New Orleans of its harbor, than are in action to produce like revolutions at any other port of the United States. With very different local features, and on a comparative recent alluvion, the permanent prosperity of New Orleans is as firmly based as if seated on rocks of granite; and we now proceed to examine another source of grandeur, whose streams must be poured into the great Mississippi emporium.

When we look upon a colored map of the United States, we cannot but be struck with N. lat. 36°, 30 min. This natural and also artificial line having Virginia, Kentucky and Missouri to the northward, and North Carolina, Tennessee, and Arkansas southward, and extending thus 800 miles from Currituck inlet to the interior plains. Rising from the level of the Atlantic ocean by a very moderate acclivity to the highest cultivated table land in the United States, where North Carolina, Tennessee, and Virginia touch each other, and thence descending by a more gentle slope to the stream of the Mississippi, and

again rising, but with very slow acclivity, N. lat. 36°, 30, constitutes a limit of climate, and in some degree of Florida. It may be here observed that if we suppose a line drawn from the mouth of Sabine along the western border of Louisiana, Arkansas and Missouri, and thence due North to lat. 49°. it will leave eastward, about 1,150,000 square miles, and all the already organized States and territories of the Union. Of this great region 440,000 square miles lies southward of N. lat. 45°, and may be regarded as the cotton section of the United States. It is true, that elevation in the mountainous parts of North Carolina, Tennessee, and even Georgia, the successful culture of cotton is excluded, and that towards the Atlantic ocean and westward, in the deep and interior basin of Mississippi, that plant can be cultivated above N. lat. 36°, 30, yet in a very general view cotton thrives more and more on similar soil as its cultivation approaches the Mexican gulf.

There is an area of at least 300,000 square miles in the United States on which cotton can be cultivated, and perhaps one-half of such surface might be made a profitable object of agriculture.

N. lat. 31°, is to sugar what 36°, 30 is to cotton; the latter plant having an immensely wider range, and in fact, where the climate will admit both at the same place, sugar cane demands a more productive soil, and is therefore more limited even when cultivated in the same region.

Rice as a Cereal graminæ cannot be very successfully cultivated above the sugar cane, and though wheat can be, and in many locations is cultivated in the United States below 36°, 30, it is only above that latitude that this fine grain comes to its highest perfection. Indian corn is the most generally diffused, and suits more variety of soil than any other object of agriculture in the United States.

If we deduct from 1,150,000 square miles, 440,000, we have 710,000 square miles, as the already more or less densely inhabited section of the United States, northward of N. lat. 36°, 30. Of this latter surface about 150,000 square miles is on the Atlantic slope, and 560,000 in the interior valley. Of the southern section again must be ever in greatest part commercially connected with New Orleans, Tennessee, Arkansas, Mississippi, and Louisiana, comprising together an area of about 190,000 square miles, which latter sum added to 710,000, gives the very great area of 900,000 square miles. All this immense surface will not aliment New Orleans. The northern, and north-eastern parts will be connected more directly with the St. Lawrence, Hudson, Delaware, & Chesapeake sections. But all that these Atlantic emporia can take away, will be far more than compensated by the still more western regions drained by Red, Arkansas, White, and still more innumerable streams of Missouri. In brief, we cannot estimate at less than 6 or 700,000 square miles, the products of which must in great, and far greatest part pass by the main stream of the Mississippi. To this result the climate comes in as an unchangeable element. Over a large part of the space we have assigned to New Orleans, frost offers no impediment to navigation, and over which the vegetable summer embraces a large share of the whole year.

Having scanned the space, let us see how the population is in all human probability to be circumstanced.—From the census elements drawn from six decennial enumerations, it appears that the ratio of increase of the whole mass of population in the Union is 436 in fifty years; or the people rather more than quadrupled in half a century. By another approximation, it is found that the increase does not vary much from one-third in each decennial period, and by adopting either method, the number for 1840, comes out to a very inconsiderable fraction of what was found by the actual census.

But while the whole mass doubles in a little less than 25 years, the central has had as steady an increment in something less than 17 years. This is a comparative view which cannot be spread too wide, or seen by too many—Let any one take the census tables and analyze them carefully, and they will find what few would expect to find, that is, that the central population has went on, with a steadiness very little, if any, exceeded by that of the general mass, and therefore, while the whole body quadruples in fifty, the centre quadruples in about thirty-three and a half years.

From these elements the central population, now eight million, will be thirty-two million, before the opening of 1875. I take the liberty of a grey approaching a white head, to advise any one who may feel doubt as to the soundness of this deduction: to sit down and do what I have done some three or four times, collate and analyze the census returns.

Now to apply these data to the second query at the head of this article; or what amount of population will, in 20 or 25 years hence, have their commercial outlet by New Orleans. If we take the one-half of the aggregate population at the present time, or 4,000,000, and allow them to double in 17 years, such an estimate would give 8,000,000 in 1858, and in due proportion about from 14 to 15,000,000 in 1866, or 25 years hence.

Every rational induction from the past, and from the aspect of the present, would support the foregoing calculations, or rather would give higher results. In another paper I shall enter more particularly into the amount of agricultural products, which not only can, but must be created, if the expression can be admitted, by such accumulating and energetic masses.

AN OBSERVER.

MOTRIL COTTON.

The following very interesting papers have been lately laid before the NATIONAL INSTITUTION, and are now published under the impression that they will be of interest to many persons:

MALAGA, MARCH 23, 1841.

DEAR SIR: I take the liberty of sending by the brig Isaac Franklin, Captain Wm. Smith, to New York, a sample of the cotton such as is cultivated on this coast, particularly in the district of Motril, 50 miles south of Granada, with a view of its being examined by some of those intelligent in the growth of the plant, and who will no doubt now be at Washington.

I am told, for I am no judge myself, that the description is very fine, and it appears to me that the longevity of the plant is a peculiarity, though, perhaps, that may be applicable only in climates, like this, free from hard frosts; still I am induced to send the sample, as it can never do any harm and may result in a benefit to the country.

You will find enclosed a notice of the mode of cultivation recommended here, which I have taken the trouble to extract, reduce, and translate merely for general information, as no doubt our planters, if they should find it worthy their attention, would follow such plans as are found most suitable to their own localities, &c. Seed can be procured at any time if desirable hereafter. I have sent samples to New Orleans also, and I address this to you, supposing the subject not foreign to the views of the National Institution.

I feel highly honored by the contents of your letter of 16th December ultimo.

I am, sir, most respectfully, your obedient servant,
GEORGE REED, United States Consul.
To FRANCIS MARKOE, Jr. Esq. Washington.

MOTRIL COTTON.—The cotton cultivated at Motril may be called the "Vine Leaf" plant. It grows best in temperate climates.

The soil should be light, open, and loamy, where, if necessary, it may be irrigated—arenaceous, argillaceous, calcareous, and free from stones; very rich ground gives more foliage than blossoms. Ground too rich rots the roots, and dry, hard, tenacious, stony earth prevents their penetrating. The plant requires occasional moisture, either from rains, very heavy dew, or irrigation, and a general rule as to sites well defended from winds.

The earth is prepared by deep hoeing (in Spain) at four periods, late in the autumn, in September, at the commencement of spring, and before planting. Northern exposures require planting in trenches, and preserve the young plants in severe weather.

Manure required only for poor lands; much manure makes the plant too flourishing. Cowdung for sandy soil, horsedung for clay.

Seed before planting should be soaked 24 hours in drainings from manure heaps; a ley of soot or ashes that they may sprout quickly, because much rain at the time of sowing is apt to rot the seed. This will be discovered if the plant is not up in 8 or 10 days, and must be renewed.

Planting may commence when there is no fear of frost, and just about when rain is expected.

Cultivation is either from nurseries or on the field; the first is best in coldish situations for the preservation of the young plants, for the selection of the healthiest sprouts for setting out, and as occupying less ground at this epoch. In the beds, sow in lines 4 inches apart and 3 deep, and the seeds about the same apart. There will be a facility and dispatch in planting if the seeds are moistened and rolled in earth to prevent their adhering to each other. The beds and plants kept clear of weeds. The

field planting is by raising ridges of about a palm high, a foot in width, and on the sides of which, exposed to the sun, in holes three fingers deep, three palms apart, four seeds are placed. After the plants are up they must be cleaned of weeds and the ground kept loose around them.

For transplanting it will be observed that the plant in first coming up, with the accompanying weeds, gets the better of them in luxuriance; but after some days, the contrary will be the case, and this is the proper time for transplanting them; this is done in holes, in rows, three palms apart, four or five plants in a hole or hill, with sufficient space for a plough to pass. Weeds pulled up, and the weakest of the plants also, leaving only one in each hill. From the commencement of flowing to the dying of the flower the field should not be entered, it being injurious to shake the flower. If the plants become parched, water will restore them. If too luxuriant, no water, and even the head of the main shoot may be nipped off with the nails, which is also requisite, at all events, when the plant is about a foot high, in order to give force to the lateral branches, which produce more fruit than the main shoot.

The plant lives 12 (twelve) years if well taken care of, and continues to produce; but here (in Andalusia) it is grubbed up after six years. The first year it is allowed to grow at discretion, unless too luxuriant. It is to be pruned in the spring of the second year, (that is, after having given one crop) and trimmed down within six inches of the ground, cutting all off close to the main stem; next spring two branches are left close down about six inches long from the stem, cutting all others. Next spring all but three or four shoots are cut away in the same manner, the strength of the plant being considered. After about four months it commences to flower, and at this epoch every operation should be suspended, that may shake the bush or brush away the flowers.

The plant has its infirmities, one of which is announced by the leaves turning yellow and falling off by degrees; this is particularly occasioned by sudden changes of temperature and rapid transition from heat to cold. This is mostly observed in May, and lasts about twenty days; if repeated it is very destructive. High winds and frost, excessive heat or rain, with insects, &c. all are injurious to the plant, as well as to many other objects of agriculture.

HAYMAKING.

Scythes. Procure a good scythe for every man and boy on the farm who is to do any thing at mowing. This work of cutting the grass is hard enough, with the best implement that can be made. And where the tool is poor, the work must be done either poorly or slowly—and in either case the farmer is losing more than the cost of furnishing a better instrument. We know not—(by the way, this term *we*, I am tired of, and shall, when it so pleases me, use the more proper representative of my single self, *I*)—I know not that any one of the manufacturers of this article excels all others: some scythes from each factory are good, and others are not so;—if you are unfortunate enough to get a poor one, there is no economy in trying to worry through the season with it; gnawing off your grass; whetting every five minutes; fretting your own body or that of your hired man; going to the grindstone every two hours;—these attendants upon a poor scythe are such consumers of time that it is better to throw the soft or the brittle thing aside at once and purchase another. As a general rule the scythe that crooks towards the point works better than the straight one—at least it is so in my hands. The cast-off scythe should not be put into the hands of the boy who is learning to mow; he wants in his feeble and unpracticed hand, a sharper edge than is required by the man. Give him a good and a light tool; or else excuse him from his work.

Horse Rake. The value of this implement for use on a farm of common inequalities of surface, and of common size is often over-stated in the advertisements and puffs. But the actual worth of it justifies its purchase. We have used the revolving horse-rake for four or five seasons, on a farm where two acres is perhaps the amount mowed per day; the raking up of the thick green morning's mowing in the latter part of the afternoon, is a fatiguing appendage to the previous hard work of the day. The old horse who has been in the pasture all day, and has nothing to do at present but kick flies, can greatly lighten and considerably shorten this labor: we generally save in time probably from 45 to 60 minutes, and in strength more

than half. This saving toward the close of the day, comes in very opportunely, and we would not part with the rake for twice its cost.

To manage this instrument skillfully, requires some practice—but as soon as one gets a little accustomed to it, he can lay the winnow very well. On large farms its use must be more valuable than on small ones.—Where grain is mowed and raked up, this rake is very convenient and comfortable; it takes all clean, and saves from hard hand raking.

This instrument deserves more extensive use than it has found hitherto.

Time of Cutting. Where grasses are not lodged, it is well to cut when they are fairly and fully in blossom; but to avoid having some of them get far past this state before time can be found for securing, it is prudent to begin upon the more luxuriant fields before they reach full blossom.

Curing. In the early part of the haying season, while the grass is quite green, and much time is required for curing, it is well to be busy in turning it up to wind and sun; help it along as fast as you can—but later in the season, if the weather be good, it will be sufficiently cured the day after mowing without much assistance.

Some little matters amount to considerable in the course of the season;—in turning up hay, take the help of the wind; do this too in raking;—in raking after the cart, regard the course of the wind and the direction in which the team will next move, and so arrange as not to be obliged to rake the ground over twice. In this simple labor of raking after the cart, I have found "head work" as profitable as infancy of the operations upon the farm.

Salt. Hay that would be liable to heat and sour because not quite cured, may often be mowed away with safety, if six or ten quarts of salt to the ton are applied. The use of salt upon nearly all the hay as it goes into the barn may be wise. I am inclined to the belief that a farm in my neighborhood on which salt has been very freely used in that way, had been greatly improved by it; that is, I think the manure has been much more efficacious in consequence of the salt applied to the hay. At home we find no hay so palatable to the stock as that which is cut young, three-fourths dried and well salted.

Clover. This should be cured without much exposure to the sun. I can tell a story that goes to show that clover need not be thoroughly dried as many suppose. Last year, about the middle of June we mowed some very coarse clover, scarcely beginning to blossom, and as full of sap as clover ever was. The weather was cloudy and foggy for several days, so that but little progress was made in curing it; it continued heavy and green; after four or five days, and while the cocks were damp with fog we loaded it because the indications of rain were strong. It was taken to the barn, stowed away and very thoroughly salted. In four or five days it was dripping wet and burning hot: in 15 days it was mouldy; in December, it was the hay preferred above all others in the barn, by "old Bug Horn," a dainty cow that was destined to the shambles; every animal in the barn would devour it greedily—and this too, when most of the hay, and all the corn stalks in the barn had been salted;—the salt taste was no rarity.—*N. Eng. Far.*

KEEP YOUR LAND DRY.

The importance of draining is not duly appreciated, nor its practice well understood, among us. Although water is indispensable to vegetation, too much of it is as hurtful as too little. It is necessary to the germination of the seed, to the decomposition of the vegetable matter in the soil—to the transmission of the food from the soil to the plant—to its circulation there, and to the maturity of the product. All these useful purposes are defeated, where water remains in the soil to excess—the seed rots, the vegetable matter which should serve as the food of the crop, remains insoluble, in consequence of the absence of heat and air, which the water excludes; or, if the seed grows, the plant is sickly, for want of its proper food, and there is consequently a virtual failure in the harvest. It is not from the surface only that we are to determine whether the land is sufficiently dry to support a healthy vegetation; but we are to examine the surface stratum, into which the roots of the plants penetrate, and from which they draw their food. If this is habitually wet—if it grows marshy plants—if water will collect in a hole sunk fifteen inches below the surface—the land is too wet for cultivated crops, and means should be adopted to render it more dry. From my partial acquaintance with this country, I feel assured that much of our best land is

rendered unfit for tillage, or the growth of the finer grasses, by reason of the excess of water, which passes or reposes upon the subsoil unnoticed by the cultivator. These lands are denominated cold and sour, and they truly are so. Cold sour lands are invariably wet lands below, if not upon the surface. But if the superfluous water were judiciously conducted off by efficient underdrains, (for the construction of which, you possess the best materials in abundance,) these lands would be rendered warm and sweet, and highly productive, and the outlay would be repaid by the increased value of two or three of the first crops. Wet lands are generally rich lands, abounding in vegetable matters, which water has preserved from decomposition; but which readily become the food of plants, when the water is drawn off. Let me imagine a case, which I am sure will be found to exist in many parts of the country. There is a slope of a little hill, half a mile in extent, terminating in a flat forty rods wide, through which a brook meanders. The soil on this slope, and in this flat, is of a light, porous quality, six to twelve inches deep, reposing on a subsoil impervious to water, as clay, rock or hardpan. By soil, I mean the upper stratum, in which vegetable matters are blended with earthy materials, and which constitutes the true pasture of plants. Near the top of this slope, all along on the horizontal level, or perhaps lower down, spouts or springs burst through the subsoil, a thing very common in hilly districts, the waters from which finding an easy passage through the loose soil, spread and run down the slope, and upon the subsoil and through the flat, till they find their level in the brook. A thermometer plunged down to the subsoil, will indicate, at midsummer, a temperature probably not greater than 60° whereas to grow and mature many of our best farm crops, we require a heat in the soil of 70° or 80°. How shall we remedy this evil, and render this land profitable to the occupant? Simply by making an underdrain or drains, in a gently declining direction; a little below these spouts or springs, and, if practicable, somewhat into the subsoil. These will catch and conduct off the spouting waters, and by laying the lower plane dry and permeable to heat and air develop all its natural powers of fertility.

I will suppose another case—that of a flat surface, underlaid by an impervious subsoil. This is rendered unproductive, or difficult to manage, by stagnant waters. The rain and snow waters, penetrating the soil, are arrested in their downward passage, by the subsoil, which not having slope to pass them off, they here remain, and stagnate, and putrify, alike prejudicial to vegetable and animal health. The mode of draining such grounds, and of rendering them productive and of easy management, is, first to surround the field with a good underdrain, and to construct a sufficient open drain from the outlay to carry off the waters. Then with the plough, throw the land into ridges of twenty to thirty feet in breadth, according to the tenacity of the soil, in the direction of the slope, and sink an underdrain in each of the furrows between the ridges, terminating them in the lower cross drain. The materials of the underdrains, which are generally stones, should be laid so low as to admit of the free passage of the plough over them. The superfluous water, by the laws of gravitation, settle into these drains, and pass off, and the soil becomes dry, manageable and productive. An acquaintance called on a Scotch farmer whose farm had been underdrained in this way, and being informed that the improvement cost sixteen dollars an acre, the having been used, remarked that it was a costly improvement. "Yes," was the farmer's reply: "but it cost a deal more not to do it," which he illustrated by pointing to an adjoining farm, like situated, which had not been drained, and was overgrown with rushes and with sedge grass, and then to his own fields teeming with luxuriance and rich in the indications of an abundant harvest.

I have dwelt upon the subject of draining with more detail, because I have personally realized its benefits, and am sure it may be extensively gone into with certain prospects of reward.

JUDGE BUEL.

From the London Farmer's Magazine.

ON THE USE OF NITRATE OF SODA AS MANURE.

In the year 1849, being determined to follow up my experiments more minutely, and also to prove or disprove an objection which had been started against the use of nitrate, to the effect that it was an impoverisher of land, or at least a stimulant to intertillage—I again tried it on a good out of the centre of the acre which I had sown with nitrate in 1839, on the thin scopy gravel land, and

manured the remainder of the field with an excellent dressing of good manure, say 20 yards per acre. The nitrate was put on at the rate of 2 cwt. per acre. The manure was got on and well dressed in early in the season—the nitrate was put on the first of May. On the eighth day of May, no rain having fallen from the time of sowing the nitrate, I was walking past the field with an old experienced farmer, (Mr. T. Jennings,) who had that season retired from agricultural pursuits with the strongest prejudice against the use of such a slight and new-fangled dressing, when I directed his attention to the field, and inquired if he could perceive any difference in the appearance of the grass; when, knowing that I had used nitrate in the field, he replied, No. I then directed his attention to a part of the field farther from us, and his observation was that I wanted him to see my land on which the nitrate had been sown, and say that it had the advantage over the manure, but that he was not to be caught; for if there was a part of the field looking better than the rest, it was a small plot in a contrary direction. I desired him to point it out, and he directed me to the nitrate. I informed him the nitrate had been used there, but he would not be satisfied until he had been in the field, and found the large particles of nitrate still undissolved on the surface, when from that time until the time of cutting the grass and storing the hay, he was a constant visitor and observant watcher over the nitrate, and he assisted me in measuring 64 square yards out of the nitrate piece, and an equal quantity out of the best of the manured land, and when weighed green gave the following result:—grass cut the 26th day of June—weight of grass from 64 yards of nitrate land, 338 lbs.; ditto from 64 yards of manured land, 252 lbs.; being rather more than one-fourth in favor of the nitrate. Anxious to know whether the grass grown by nitrate was more succulent than the other, I had both pieces made as dry as possible, put into two small cocks, and covered with thatch. On the 14th of July, or eighteen days from the time of cutting, the day being fine, I had the cocks broken out under my own superintendence, and exposed them to the wind and sun until evening, when I had them weighed, and found the nitrate grass wasted from 338 lbs. to 88 lbs., being little more than one-fourth the original weight; and the manured grass from 252 lbs. to 66 lbs. being also little more than one-fourth the original weight. Having done this, I found no great difference in the waste of one lot over the other, but I gained the knowledge that the nitrate hay was neither more nor less than 1 qr. heavier than the manured hay. Weight per acre from manure, supposing the whole as good as was the trial piece, 2 tons, 4 cwt., 2 qrs. 7 lbs.; and from nitrate, 2 tons, 19 cwt., 1 qr. 19 lb. The above is the last of my experiments; and so fully am I satisfied with the success of my own trials, that this season (1841) I shall use nitrate of soda on 20 acres of grass land, and would recommend such of my friends and the public generally, to whom cheap dressing is of any consequence, not to be carried away by any thing that I have written on the subject into an extravagant use of this, in my humble opinion, wonderful fertilizer; but first test it on the small scale, and if found to answer, it will then be for them to choose whether they will use or refuse its assistance.

THE ROTATION OF OATS AND TOBACCO, BOTH PROFITABLE AND MELIORATING.

To the Editor of the Farmers' Register.

When we met last, I think the general complaint of the failure of the crop of wheat in eastern and middle Virginia was the subject of our conversation. I had then but recently met several gentlemen of high agricultural reputation, who were anxious in their inquiries about the culture of tobacco, with which they had heretofore no acquaintance. In a brief and interrupted conversation there was little opportunity to explain fully a plan for the rearing of tobacco which I had before recommended in your Register, and which farther experience has convinced me is highly judicious, if not indispensably necessary, in the present state of our lands. With a view to benefit these gentlemen, I propose to recommend again this plan through the medium of your paper. The general opinion that our country, from the mountains to the seaboard, owes its devastation to the culture of tobacco, I shall not pretend to controvert, whilst I assert that the crop is nevertheless, not particularly exhausting. The same system pursued in any new, wooded country, capable of producing a rich staple, and where labor is attainable, will produce the same results, whatever may be the crop. We

witness this in the south-west, where cotton is made exclusively for sale; in Louisiana, where sugar is the crop; and in most of the West India Islands. Even in Kentucky, so favorable to the grasses, there are not wanting instances to show how certainly even the best lands will be exhausted, without proper care and attention.

However this may be, it seems now a matter beyond a doubt, that we must make tobacco in a certain region of Virginia, or we must have no income. Wheat, (all agree,) cannot be relied upon. Our soil is too much exhausted, and the climate too arid, for grazing. For horticultural productions we have no market, and we are north of the cotton region. Tobacco has been a source of annual wealth in times past—is so now in a portion of the state, and, in my opinion, may be profitably cultivated again wherever it has been so in former days. Some one, curious on such subjects, has said, "that if you will draw a line through Raleigh in North Carolina, from the Atlantic to the Mississippi, and another parallel to it through Fredericksburg in Virginia, to the same river, you will include the best tobacco growing region." I believe that is true. It is certainly true that those lines include a country unfit (in general) for any other staple crop, (since the acknowledged failure of wheat,) and one where any improvement in the culture of tobacco, which will preserve the land and secure a good crop, ought to be most eagerly sought after. The plan I propose is so simple, that many will be deterred from trying it by that fact. It is to lay apart two lots of a size adequate to your force and other circumstances, and cultivate them alternately in oats and tobacco, rolling down the oats when perfectly ripe and leaving them on the land. A judicious manager will certainly make these lots rich to begin with, otherwise he can expect no crop of tobacco for a few years; for although, I believe, in a series of years land may be made rich by this system, even if originally poor, yet no one would be willing to give up two, three or more crops whilst it was becoming so. He will likewise select, (if possible,) land that lies well, to guard against the washing rains, and of course would choose low-lands not subject to inundation, if he had such. In addition to the decided annual improvement of land thus used, there are other advantages, any of which should induce every planter to try the plan. Your manure, withdrawn from your tobacco crop, may be applied to the improvement of the rest of the farm. The field on which oats is rolled down is put in finer tilth—better suited for tobacco to stand well, and grow off in, than by any process I have seen. Your fields are permanent, and therefore your tobacco houses may be made so, instead of being scattered all about the plantation wherever you may chance to make a little tobacco; and, lastly, there is less labor in the cultivation than on common lots or new land. Some tobacco growers believe they receive but small compensation for their labors unless they make a pound for every three plants. This is certainly a very good crop; but I have known it made more than once, and by one gentleman very commonly. The system of alternating oats and tobacco will insure this product in any year, (if your lots be well selected,) after a few crops of oats have been rolled down. Every man at all versed in the cultivation of the earth will readily perceive that ploughing in the oats and sowing peas would probably hasten the fertilization of the lot. I have not tried it, because at the season, when oats are ripe, we generally are pushed for time—and rolling down has answered a good purpose, and is quickly done. I had intended to add a few words describing the mode of cultivating tobacco most approved about here; but, perceiving the last numbers of your Register to contain two essays on that subject, the one from Maryland, the other from Kentucky—both of which are obviously unsuited to us, I will not doubt that some one much better qualified than myself will at least adapt the above essays to our country and climate. You will understand that I am not vain enough to pretend to instruct veteran tobacco growers. My object is to aid some few especial acquaintances who are just about to commence the culture of this plant, and with whom I have already had some conversation.

H. M.

[We are gratified to meet again, as a contributor to the Farmers' Register, after a long interval of silence, our personal acquaintance and friend, the writer of the above communication. As interesting as it is, and valuable for the novelty, to most persons, and simplicity and cheapness of the mode of improvement which it recommends, it would have been more useful, and had more weight, if, instead of being anonymous, it had been signed by the

writer. We should also have been pleased, and so would hundreds of those who will be readers of the communication, if he had been more full in statements of experienced results of the plan of culture proposed. We trust he will continue, and enlarge upon this interesting subject hereafter. In the meantime, we will copy below a paragraph from the Farmers' Register, vol. I. p. 441, which was referred to above, and which has not been seen by much the greater number of our present subscribers.—Ed. F. R.]

"Mr. William Old, of Powhatan, has, for the last ten or twelve years, made as large crops of tobacco, I mean for the quantity cultivated, as any man in the state,—never or very rarely less than 1000 lbs. to the acre—sometimes a great deal more; and this too always commanding a high relative price. He has two lots for tobacco, one of which is planted every year, followed the next spring with oats, which, when ripe, are rolled down, or turned under with the plough, as he thinks best. This crop of oats not only supplies as much fertility as the tobacco may have exhausted, but the lots are becoming richer every year. On these lots he uses no manure; that is reserved for his corn and wheat. The cost of the seed oats is about fifty cents the acre. The labor of sowing and afterwards rolling down is very trifling—not equal to the expense of carting the manure on the lot if it was given to him. What I would principally call your attention to is the fact:—That the general character of his farm has been more improved in the last ten years whether you regard its appearance or its product, than any other farm, save my friend Wm. Finney's, within my knowledge—during the whole of which time he has cultivated tobacco successfully. Nor are there any peculiar circumstances of a favorable character which apply to his farm and situation, more than to others. On the contrary, his predecessors were literally unable to support their families on the farm which he has thus improved. These are the facts on which I rely to prove the position, viz. That the culture of tobacco is not incompatible with the improvement of the land; and I think they will be allowed fully to sustain it by all who will take the trouble to inspect Mr. Old's estate."

GOOD CULTIVATION.—Some gardeners and cultivators with whom we are acquainted, think that as soon as a shower of rain is over, they must sieze the hoe and run out to kill the weeds. This is bad husbandry in two respects. First, if the ground is stirred when it is wet, the earth is adhesive and it will dry in hard lumps and make a bad matter worse; secondly, hoeing at such a time will inevitably but transplant the weeds, and they will soon shoot up again.—Let the top of the soil be dry when you hoe.—This is important, not only to destroy the weeds, but the crop will suffer less from dry weather, if hoed in such a time, than if stirred at a different time. One of the best ways in the world to prevent the effects of a drought, is to stir the land when it is dry. It is a mistake to suppose that the porous condition of the surface which is left by hoeing, allows the moisture to escape more rapidly. It will not escape so fast, as if it was not hoed. There is a greater circulation between the earth and the air, and in a dry time a greater amount of dew falls upon the plants in the night, when the earth is loose at the surface, than when it is compact and hard. The oftener you hoe the ground, when it is properly dry, the surer and larger will be the crop. If this could be done every day, without cutting the lateral roots, your plants would be thankful for it.

Some of our neighbors, who have visited our garden—it is a large one—marvel how it is that there never appear to be any weeds in it. For themselves, when the plants in their beds are up and large enough to be hoed, they are immersed and overtopped in weeds, and it is a dreadful job to pick them all out and leave the plants to the sole occupancy of the soil. But before oats are hoed, they see but a very few weeds in the beds—the rows of plants are all distinct and free, and appear as if they had already been hoed clean. We will tell them how this is done. In the first place, we never allow a single weed to go to seed in the garden. Of course then, there will be no seeds from this cause to come up the next spring—only such as have been borne upon the premises by the winds from adjacent grounds. We take as much care to kill the infant weeds, all summer and in autumn, as we do in spring. Then again, we never put on land *weedy manure*. They who make their beds of new stable manure, which is filled with the seeds of grass, clover, sorrel, pig

weeds, &c. must expect that those weeds will come up as soon as their beets, onions, carrots, &c. and being more numerous, they will cover the ground very early. We are careful to dress the soil only with manure that has undergone the fermentation of at least one season, which has killed the weed seeds. Then we plant and sow as soon as the land is manured and pulverized, so as to give the seed we sow as fair a chance in time, as the seeds of weeds that may chance to be in the manure. As soon as weeds do appear, and we can distinguish our plants we go at them in earnest—not allowing them to get the mastery. By such timely care, we are troubled with weeds but little through the whole season.

Rich soil, kept soft by frequent hoeing, and free from weeds, will in ordinary seasons, produce perfect crops. *Maine Cultivator.*

THIN RIND PIGS.—Mr. George E. Blackburn of this county, slaughtered last fall a lot of 19 pigs, got by a Thin Rind boar out of part blood Woburn sows, which, at 14 months age, averaged nett 319 lbs. They were fairly kept according to the usage of the country, neither starved nor gormandized. After weaning, they followed the milk cows, which had been fed on corn, through winter. In the summer they ran upon grass and had the usual preparation of small grain and were finished off with six weeks feeding on corn.—*Ky. Farmer.*

BALTIMORE MARKET.

Cattle.—The supply of Beef Cattle in the market during the week has been good, and prices have ranged about the same as last week. On Monday about 220 head were offered and 180 sold at the drove yard at \$6.50 for inferior to \$7.25 per 100 lbs. for Prime. Other parcels have reached the city since. A drove of 120 head were taken north yesterday by the owners, and several lots now here are held over for higher prices. Live Hogs are in good supply and continue dull at \$4.25 to \$4.50 per 100 lbs.

There was a good supply of Beesves yesterday at the drove yards, and sales were effected at \$6.50 to \$7.50 per 100 lbs. nett, for good to prime.

Cotton.—We are advised of sales of 100 bales Upland at 11 1/2 cts; of 60 bales Alabama at 12 1/2 cts; and of 50 bales Georgia, common quality, at 11 1/2 cts.

Tobacco.—The receipts of Maryland are smaller this week than for some time past, and the transactions are consequently less extensive. There has been a fair and regular demand throughout the week for the inferior and common qualities, and all of these sorts that reached the market were quickly taken at prices ranging generally from \$4.45 to \$5.50. The better qualities are less in demand, but sales are occasionally made within the range of quotations, which we continue, viz. inferior and common \$4.45 to \$5.50; middling to good \$5.75 to \$6.00; good \$6.25 to \$6.50; and fine \$6.75 to \$7.00. Holders generally are very firm at these rates. Ohio Tobacco has been in fair demand at prices which fully sustain former rates, viz. common to middling \$4.50 to \$5.25; good \$5.50 to \$6.00; fine red and wrappery \$6.25 to \$6.50; prime yellow \$7.00 to \$7.50; and extra wrappery \$12.00 to \$12.50. The inspections of the week comprise 456 bbls. Maryland; 401 bbls. Ohio; 13 bbls. Kentucky; 1 bbl. Pennsylvania; and 14 bbls. Virginia—total 885 bbls.

Wool.—The only transaction that we hear of this week is a sale of a limited parcel of washed Common at 50 cts. The receipts of the new clip have been small thus far, and parcels have been generally taken on arrival at fair prices. There is a prospect that the market will be well supplied this season.

Flour.—The Flour market is very quiet this morning, and we quote for Howard street at \$5.75 from stores, and \$5.50 from wagons. No sales of City Mills, which is held at last quoted rates, \$6.

Grain.—As the harvest approaches, the demand for Wheat is considerably lessened. Sales of some parcels of Maryland red and white were made this morning at 120 to 122 cents. A sale of Maryland white Corn was made at 68 cents. In other descriptions of grain we hear of no transactions, but prices remain about the same as last quoted.

A Richmond, 1st inst. Flour was quoted at \$5.25 to \$5.30. Nothing doing in Wheat; Corn 65 to 70 cents; Oats 45 to 50; Tobacco remained without alteration. The market was well supplied with provisions of the small stock—Sheep \$3.24 per head; Lambs \$2.25; Veal \$5.10; Beef \$6.27 per 100 lbs. The quantity of Flour inspected in Richmond during the last twelve months, was 162,896 barrels, a deficiency of 77,108 bbls, when compared with the preceding twelve months.

At Wilmington (N. C.) 30th ult. sales of Tar at \$1.25, and Turpentine at \$2. Lumber was in demand, a lot of fair quality Boards sold at \$7 1/2. Corn scarce at 55 to 60 cents.

Philadelphia, July 2.—Flour this week has been firm at \$5.25 for good Pa. brands, with sales; a few hundred bbls. extra for a particular market, at \$5.50 per bbl. The export demand is only moderate, but the receipts are light. Rye Meal is steady at \$3.25 per bbl. Brandywine Corn Meal in hds. is firm at \$14, and bbls. \$3; Penna. do in hds. \$13.25, bbls.

\$2.75. The receipts of Grain of all kinds continue very light and probably will remain so until after harvest. Wheat is in demand, and finds ready sales at 11 1/2 to 12 1/2 cts for prime 1st red, at which rate sales have been made of several thousand bushels. Little or no Southern has arrived this week. Rye is worth 62 cts. per bushel. Yellow Corn 55 to 60 cts. Oats are scarce and in demand, and little arriving by water; sales 39 to 40 cts. per bushel. About 300 head Beef Cattle were sold at \$5.15 to \$7. Hogs—Market drooping; sales \$4.25 to \$4.50. Sheep—1800 at market; sales from \$1.50 to \$2.25. Tobacco.—The market is again rather quiet; the limited sales sustain the previous rates; stock increasing, but holders firm.—Sales, 20 hds. Kentucky, common, at 6 1/2 cts. Several small lots amounting to about 100 hds. were sold at former prices. The inspections for the week amounts to 426 bbls, and for the past month (June) there were inspected the unusually large number of 1640 bbls. and also a number of bxs.—4526 bbls. have been inspected this season. Winter Cut Oak Wood, \$5.50 per cord, Dry Oak, \$5.50 to \$5.75 do. Pine Wood \$4.25 per cord. Hickory do. \$6.27 per cord. The receipts fair the demand moderate. Cotton.—The market has been rather active during the week, the sales amounting to upwards of 500 bales at fair prices, viz: 111 bales New Orleans at 12 1/2 cts; 157 do do at 13 1/2 cts; 42 do do 12 1/2 cts; 75 do Mobile at 13 1/2 cts; 23 do New Orleans at 12 7/8 cts; 50 do Upland 12 1/2 cts; 50 do Georgia 12 1/2 cts. all on time, 4 and 6 mos.

At Mobile, 26th ult. the stock of Cotton on sale amounted to about 4500 bales—sales of the week were 300 bales at 9 to 11 cts. as in quality. Flour, from stores \$5, with a limited demand. Corn 60 cts; Oats 55. Provisions—No demand for Bacon; hams 57 cts; sides 4 1/2 cts; shoulders 3 1/4. No sales of Pork. Lard 8 1/2 cts.

At Savannah, for the past week the sales of Cotton were 2084 bales, at 6 to 11 cts. Sea Island had considerably declined, and sales at 20 to 24 cts. Flour was in moderate request at \$6 to \$6.25 for Baltimore Howard street; Canal at \$6.50 to 6.75. Corn retailing from stores at 80 to 85 cents. Rice \$3.37 1/2 to \$3.50.

At Charleston, last week sales of Cotton were 2082 bales at 7 1/2 to 10 1/2 cts. Rice \$2.50 to \$3.62 1/2. The receipts of Corn were 5000 bushels Maryland and Virginia; sales at 67 cents. Flour—demand limited to small lots at \$6 to \$6.25 for Virginia and Baltimore Howard street.

At New York, Sunday, 4th P. M.—The foreign advices by the Britannia do not seem to be of any startling importance. I am sorry to perceive that there has been no improvement in the Liverpool cotton market, and that the general prospects of trade are still gloomy. All hope of the President appears to be abandoned.

The sales of cotton were light yesterday, and without further change. Flour is firm, yet I think not so buoyant as for a week or two past. Genesee \$5.50 to \$5.64; Ohio 5.37 to 5.50; Michigan 5.31 to 5.37 1/2; Georgetown and Howard street 5.50. The receipts of grain are very light. Wheat is firm at \$1.25 to \$1.30. Sales of 2,000 bushels Jersey corn at 62 1/2 cents; 800 Northern at 62 1/2, weight; 2,000 bushels Northern oats at 45. No Southern oats or corn at market. Rye 60 to 61.

At Liverpool, June 18th.—The sales for the week ending 4th inst. were 12,000 bales, for that ended 11th inst. they were 19,880 bales—and for the present week they amount to 23,100 bales, of which 5500 were Upland at 5 1/2 to 5 3/4; 12,430 Orleans at 5 1/2 to 5 3/4; 4450 Alabama and Mobile at 5 1/2; and 70 Sea Islands at 13 1/2 to 14 per lb., and the business has been chiefly by the consumers. The stock in this port is now estimated at 549,000 bales, of which 440,000 bales are American, against 376,000 bales at this period last year, of which 320,000 were American.

The weather has been cold and dry for the past fortnight, and our harvest will not be so early as was at one time expected, the Corn markets are consequently rather higher, and bonded Wheat selling at 22 1/2 to 23 1/2 cts per bu. Should a change of Administration take place we have reason to hope that some alteration for the benefit of our commercial relations will be adopted, particularly in regard to the duty on Grain, on which all parties seem to be of opinion some modification is necessary. Turpentine is again lower, a parcel of 800 bbls. having been sold at 10s 10d to 11s 1d per cwt, and for 1500 bbls of very good quality 10s 10d, being the highest offer; it was withdrawn and is going into store. The Tobacco market is very dull.

At Havre, June 14th.—The cotton market remained in about the same position as before. The sales effected that day amounted to 1986 bales, viz: 670 bales Louisiana at 85¢ to 96¢; 761 Mobile at 77¢ to 86¢; 417 Georgia at 94¢ to 92¢, and 120 Florida at 64¢.

HARVEST TOOLS, &c.

The undersigned are now manufacturing and offer for sale Revolving Horse RAKES, made with hickory and oak teeth and superior finish, price \$12.

Hand RAKES, with 2 and 3 bows, bent and straight head, a prime article, at \$7.50 cents.

Grain Cradles with warranted Scythes attached and made with wood and iron braces at \$4.50.

Hay Forks, from capped, first rate and common, at \$7.75 cts.

Scythes and Hangers complete at \$2.25 to \$3.50.

Also—Sickles, Scythe Stones, Scythe Ribes, Cradles, Corn and Tobacco Cultivators, common and expanding at \$3.50, Harrows, &c. &c.

R. SINCLAIR, Jr. & Co.

je 30 60 Light street.

BERKSHIRE HOGS.

The subscriber offers for sale, 2 Berkshire Sows, 8 months old, out of a beautiful sow from Judge Spencer's stock, and sired by Long-ear, imported Jack of Newberry. They are well grown and in pig by Gorseuch's imported boar Prince Albert. Price \$40 for the one, and 45 for the other. Also several pairs of very fine Pigs, 9 to 12 weeks old, black Berkshires, at 20 dollars per pair. Also a variety of other Hogs of different breeds, as per former advertisements.

SHORT-HORN DURHAM BULLS.

The subscriber offers for sale, several young Durham Bulls, of the best milking stock in the country, and surpassed in point of symmetry of form by none others, perhaps, in the U. States. Their ages are 7, 13, 18, 26 and 30 months, and prices ranging from 150 to 275 dollars.

The subscriber is authorized to dispose of the following valuable Stock, and the opportunity offers to gentlemen desirous of improving their stock, of making a selection, which is not often presented.

COWS.

Favorite, 11 years old—Lady Washington, 9 years old
Beauty, 9 do. Young Favorite, 7 do.
Young Lady, 7 do. Rosey, 6 do.
Lilly, 5 do. Moss Rose, 3 do.

The pedigrees of the above will be given in full to purchasers—they were bred by Wm. K. Townsend, Esq. of Connecticut, who says they "will compare with the same number of Cows in any section of the United States, for beauty, size and quantity of milk, and all their stock is fine." They will be sold at \$300 each, deliverable in this city.

BULLS.

No. 1. Lord Durham, calved 20th April, 1828, white spotted with red, and nicely matched all over; he is a splendid bull, large size, is from Beauty, by Lord Althorp; Beauty is from Favorite (got in England by a celebrated bull, Fite's Favorite,) and she from Old Lady—price \$350.

No. 2. Young Comet is full brother to the above, just one year younger, good fair size, handsome dark red, white spots about the flanks, belly and legs. he is a prompt and active bull—price \$300.

No. 3. Wallace, calved 21st Aug. 1838, dark red, and marked much as Comet; he is from Young Favorite, by Lord Althorp; Young Favorite is from Old Favorite, by Malcom; he was from John H. Powell's stock; a very compact and snug made bull, \$300.

No. 4. Don Pedro, a red roan from my cow Cherry, by Lord Wellington, was calved 9th Feb. 1840, and is a fine bull—\$300.

No. 5. Match Him, red roan, from Rosey, by Lord Althorp, calved 1st May, 1840, a splendid bull, \$250.

No. 6. Young Rocket, white, from Lilly, by Henry Whitney's imported bull Rocket, calved 20th August, 1840, large and fine, \$200. This bull's sire Rocket took the highest premium at the Fair of the New York Institution, and at New Haven last fall—he is a superb animal.

No. 7. Roman, calved 21st Aug. 1840, from Old Favorite, by Lord Durham, red roan—\$200—a nice pointed bull—Old Favorite took the first prize at the Cattle Show in New Haven last Fall.

HEIFERS.

No. 1. Snow Drop, was calved 18th April, 1839, is from Young Lady, by Lord Althorp, white with red ears and red spots about the eyes; large and nice—\$200.

No. 2. Young Reary, calved 15th June, 1839, is from Rosey by Lord Althorp, bright red with a white spot on the rump, and white spot in the face, and some white on the belly; a fine heifer—\$200.

No. 3. White Rose, calved 10th March, 1840, is from Mr. Whitney's bull Rocket; a fine clean white animal, \$200.

No. 4. Queen Victoria, calved 28th April, 1840, is from Moss Rose, by Lord Wellington, roan red, a beautiful animal, \$200.

No. 5. Violet, was calved 27th Jan. 1841, from Lady Althorp, by Lord Durham, roan red, a very promising heifer, \$150.

The above are also bred by Mr. Townsend, are all in a good healthy condition, not fat, and will do go to a southern climate—My cows (says Mr. Townsend) are extra milkers, giving a large quantity and extra quality.

ALSO—Belonging to a gentleman who has retired from farming, and who desires the following for his own use:

The imported Short-horned Cow *Mistake*, was sent out by Mr. Whitaker: a beautiful strawberry roan, of large size and fine points. Got by Edwin, see Herd Book, No. 1957. Dam Mulberry (herd book, vol. 3, page 523); she by Isaac, 1129, grand dam by Whitworth, 1584; gr. g. d. by White Comet, 1582, a son of Mr. Collins' celebrated Comet, who was sold for 1000 guineas. Mulberry has the advantage, possessed by but few cows in this country, of standing in the Herd Book in her own name, (vol. 3, page 523.) She was calved 23d December, 1835, and is now in her prime, 5 years old, and is in calf by the imported bull *Llewellyn*—price \$400.

North Point—deep red heifer, calved Sept. 12, 1839, dam Mr. Whitaker's "Estelle," sent out to this country in the summer of 1839, sire Sir Thomas Fairfax, the bull from whom Mr. Whitaker was then breeding. Estelle was by Colonus, 1847, her dam Empress (see Herd Book, vol. 3, p. 372) by Imperial, 2151, gr. dam by Favorite, 1030, gr. g. d. by Lord Grant's Snow Ball, 2648, &c. &c.—price \$250.

Norma—a strawberry roan heifer calf, calved June 18, 1840, dam *Mistake* (above described), sire the bull "Sir Robert," sent out by Mr. Whitaker, and sold to R. E. Lee, Esq. of Virginia for \$700. Sir Robert is by Clarion, dam Bellflower by Sultan, 1465, grand dam Rolia, by North Star, 453, own brother to Comet, (Mr. Collins' 1000 guinea bull.) Clarion was connected directly by his sire Young Sea Gull, with the North Star strain, and by his dam Glorinda with that of Comet—price \$120.

Pickwick—a beautiful young Bull of a fine mottled red and white, bred by Mr. Shepherd, at Jefferson co. Va. calved Feb. 3d 1839, and now 27 months old. His sire is the imported bull Dr. Berry, bred by the Rev. Henry Berry, and purchased at his sale Dam the imported cow Daisy, by Gamford, 2044, he by Thorp 2757, grand dam Caroline, by Young Rockingham. Dr. Berry is by Martin, 2279, and he by Belmont, 1709, out of Rosanna by North Star, 453. His dam Minnie by Wharfedale, 1578, grand dam

Minna by Nestor, 452, gr. g. d. Minerva by Harold, 291, gr. g. d. Mary by Meteor, 432, gr. g. d. dam Magdelena, bred by Mr. Colling, by Comet, 155—price \$450.

ALSO—Imported short horn bull *Llewellyn*, roan, calved May 13, 1836, got by Maggot, 2338, bred by the Rev. Henry Berry, d. Gay, by Mr. Whitaker's Norfolk, 2377; gr. d. Grizel, by Young Wariaby, 2812; gr. g. d. by a son of Dimple, 594; Sir Dimple's sister was sold at Mr. C. Colling's sale for \$410 guineas; gr. g. d. dam by Mr. John Woodhouse's roan bull Layton, a son of Mr. Charge's grey bull, 872. He is a beautiful fashionable roan, of fine points, and clean neck and head, and as will be seen by his pedigree, is as thorough and high bred an animal as is to be found in Europe or America—price \$400.

—ALSO—

Defiance 3d, improved short-horn Durham, a beautiful animal, 2 years old, dam D. S. Hart's celebrated butter cow (produced from 15 to 20 lbs. per week), sire Defiance the 2d, grand sire Defiance the 1st, owned by Mr. Whitaker. Defiance 2d, sire to the above bull, was sold at H. Powell's sale of Whitaker's stock in April, 1836, at 9 mos. old for \$270, and purchased by J. Barney, Esq. of Delaware—price \$250.

AYRESHIRE—Two young Bulls, 18 months old, now ready for service—price \$100 each if taken from the owner's farm, 10 miles from this city, or \$125 if placed on board a vessel with fixtures, feed, &c. for any port in the U. S.

The above stock will be sold at prices annexed, delivered in this city, but shipped the price of pen and feed, to be added. In all cases payment must be secured before an animal is shipped.

DEVON STOCK.

A gentleman of this city, having a number of Durham, Devon and other Cattle, and his arrangements not enabling him to keep them separate, will sell his Devon Bull, a Devon Cow with a fine heifer calf by her side, and a 3-4 Devon Cow, by a fine Devon bull of the best stock, out of a half Durham and half Devon Cow which was one of the best milkers known here, yielding her 30 quarts per day, whose dam was sold to Col. Williams of South Carolina for \$150. The owner for reason above assigned, is anxious to sell, and will dispose of the Bull, two Cows and Calf for \$200, or in proportion for any part of them. The bull and cows are about 3 years old. For further particulars apply to

SAML. SANDS.

BERKSHIRES & IRISH GRAZIER PIGS.

The subscriber will receive orders for his fall litters of pure Berkshire Pigs bred from stock selected of C. N. Bement & John Lossing, Esqs. of Albany, N.Y. and importations from England; also for the improved Ulster breed of Irish Graziers, bred by Wm. Murdoch, Esq. of Annaroe, co'y Monaghan, Ireland. Price, same as at Albany for pure Berkshire \$25 per pair; for Irish Graziers \$25 per pair, with the addition of \$1 for Cage, deliverable in or shipped at the port of Baltimore.

Address, post paid,
June 17

JOHN F. E. STANLEY,
Baltimore.

HUSSEY'S REAPING MACHINE.

The subscriber continues to manufacture his Reaping Machine in Baltimore. He has been enabled by the experience of another year to make several important improvements, which will add greatly to its durability, and render it still more manageable in the hands of inexperienced persons.

Those persons who intend to procure machines for the next harvest, are requested to apply early, as the supply will be limited to the probable demand. The demand at the last harvest, as at the harvest previous, could not be supplied, although the manufacture had been more than doubled. The same reasons which operated to limit the supply last year (the uncertainty of the crop) still operate—yet from the settled conviction of the great utility of the machine, which very generally prevails amongst the farmers of Maryland, where the machine is best known, an increased number will be made this year. The machine is warranted to equal the highest recommendations which has ever been given to it with any shadow of reason.

He has also resumed the manufacture of his highly approved Corn Sheller and Husking machine, which had been for a time relinquished to other hands. Its merits are too well known in Maryland to need a remark farther than to say, that those now made by the subscriber are greatly improved with a cylinder presenting a solid iron surface instead of segments, besides several important additions. He has also lately constructed an implement on a new plan to cut beets and turnips for cattle feed, with the necessary despatch—price \$10.

OBER HUSSEY.

Feb 10.

LIME, LIME.

The subscribers inform the public that they are now prepared to receive orders for any reasonable quantity of first quality Oyster Shell Lime, deliverable at their kilns on the farm of Capt. John C. Jones, Lower Cedar Point, or on any of the navigable waters of the Potomac, on very accommodating terms. Having been engaged for the last ten years in the Lime burning business entirely for Agricultural purposes in Pennsylvania, we would not think it necessary to say one word in favor of it as a manure, within its limits, it being well established; but being now located where perhaps it may be called by some an experiment, we refer to the Reports of Mr. Ducatel, Geologist for this state, to the Legislature.

DOWNING & WOOD, Cedar Point, Milton Hill P. O.
ja 13 6m* Charles Co. Md.

LIME—LIME.

The subscribers are prepared to furnish any quantity of Oyster Shell or Stone Lime of a very superior quality at short notice at their Kilns at Spring Garden, near the foot of Eutaw street, Baltimore, and upon as good terms as can be had at any other establishment in the State.

They invite the attention of farmers and those interested in the use of the article, and would be pleased to communicate any information either verbally or by letter. The Kilns being situated immediately upon the water, vessels can be loaded very expeditiously. N.B. Wood received in payment at market price.

E. J. COUPER & Co.

JOHN T. DURDING, Agricultural Implement Manufacturer, Grant and Ellicott street near Pratt st. in the rear of Messrs. Dismore & Kyle's, Baltimore.

Anxious to render satisfaction to his friends and the public, has prepared a stock of Implements in his line, manufactured by experienced workmen, with materials selected with care; among them, Rice's Improved Wheat Fan, said to be the best in use, and highly approved of at the recent Fair at Ellicott's Mills, \$25
Straw Cutters, from \$5 to 30
Corn Shellers, hand or horse power, 13 to 25
Thrashing Machines with horse powers, warranted, and well attended in putting up, \$150
Corn and Cob Mills, new pattern.

The Wiley Plough, Beach's do. Chenoweth's do, New York do, self sharpening do, hill-side do of 2 sizes, left hand Ploughs of various sizes, Harrows, hoes or plain; Cultivators, expanding or plain, 4 sizes; Wheat Cradles, Grass Scythes hung, &c.

Castings for machinery or ploughs, wholesale or retail; Hames' Singletrees, and a general assortment of Tools for farm or garden purposes, all of which will be sold on the most pleasing terms to suit purchasers. on 14

HARVEST TOOLS.

J. S. EASTMAN, in Pratt near Hanover street, has on hand the real Waldron Grain and Grass Scythes; also American Grass Scythes that are warranted, and returnable if not good; superior Pennsylvania made Grain Cradles; a prime lot of Grass Seeds at wholesale or retail; 400 Connecticut made Hay Rakes, equal to any ever offered in this market, at wholesale or retail; a prime article of cast-steel Hay and Manure Forks, also Hoes for garden use, and Elwell's best English made field Hoes, together with a general assortment of Agricultural Implements, such as Ploughs of all kinds, Harrows, Cultivators for Corn and Tobacco, Wheat Fans, at various prices, a superior article; Horse-power Thrashing Machines—Farm Carts, with lime spreading machinery attached—a large quantity of Plough Castings constantly on hand, for sale at retail or by the ton—Machine Castings and machinery, made in the best manner and at short notice—likewise repairs, &c. &c. On hand several different Corn Planters, that have a good reputation.

N. B. Always on hand, Landreth's superior Garden Seeds, at retail. ma 26. J. S. EASTMAN.

PLOUGHS!! PLOUGHS!! PLOUGHS!!!

A. G. & N. U. MOIT.

Corner of Ensor and Forrest-streets, O. T., near the Belle-Air Market.

BEING the only Agents for this State, are now manufacturing the celebrated WILEY'S PATENT DOUBLE POINTED CAPT PLOUGH, of the New York Composition Castings, which is pronounced by some of the most eminent and experienced farmers in the country, to be the best which they have ever used, not only as regards the ease and facility with which it turns the sod, it being nearly one draught lighter than ploughs of the ordinary kind, but also for its economical qualities; for with this plough the Farmer is his own Blacksmith. Every farmer who has an eye to his own interest, would find that interest promoted by calling and examining for himself. We also make to order, other ploughs of various kinds, CULTIVATORS, CORN SHELLERS, GRAIN CRADLES, STRAW CUTTERS, RICE'S IMPROVED WHEAT FAN, &c., &c. Thankful for past favors, we shall endeavor to merit a continuance of the same. ma 3 13

HUSSEY'S CORN SHELLER AND HUSKER.

The subscriber respectfully informs the public that he is now engaged in manufacturing these celebrated machines; they are now so well known that it is not deemed necessary here to enlarge on their merits further than to say, that the ordinary work is 40 bushels of shelled corn per hour, from corn in the husk, and one hundred bushels per hour when it is previously husked. Abundant testimony to the truth of this can be given if required, as well as of the perfect manner in which the work is done. His machine could be made to do double this amount of work, but it would be necessarily expensive and unwieldy, besides, experience has often shown that a machine of any kind may be rendered comparatively valueless by any attempt to make it do too much, this therefore, is not intended to put the corn in the bag, but to be exactly what the farmer requires at the low price of 35 dollars.

The subscriber also informs the public, that he continues to manufacture Ploughs of every variety, and more particularly his patent self sharpening plough, which is in many places taking the place of ploughs of every other kind. He also manufactures Martineau's Iron Horse Power, which for beauty, compactness and durability, has never been surpassed. The subscriber being the proprietor of the patent right for Maryland, Delaware, and the Eastern Shore of Virginia, these horse powers cannot be legally sold by any other person within the said district.

Thrashing Machines, Wheat Fans, Cultivators, Harrows and the common hand Corn Sheller constantly on hand, and for sale at the lowest prices.

Agricultural Implements of any peculiar model made to order at the shortest notice.

Castings for all kind of ploughs, constantly on hand by the pound or ton. A liberal discount will be made to country merchants who purchase to sell again.

Mr. Hussey manufactures his reaping machines at this establishment. R. B. CHENOWETH, corner of Front & Ploughman sts. near Baltimore st. Bridge, or No. 20, Pratt street. Baltimore, mar 31, 1841

LIME FOR AGRICULTURAL PURPOSES.

The subscribers have erected kilns for burning Lime on the farm of Vincent Lloyd, Esq. at the mouth of Pickawaxen Creek, on the Potomac, and are now prepared to furnish farmers and planters with the article, of a superior quality for the above purposes, at the low price of ten cents per bushel, delivered on board vessels; and there will be no detention to the vessels receiving the same. All orders will be punctually attended to, addressed to *Nelson Hill Post Office, Charles county, Md.* ap 7-6m LLOYD & DOWNING.